

**Remarks/Arguments**

1. Amendments to the Title

Applicants have amended the title of the invention so that the same is commensurate with the scope of the claims. No new matter has been introduced by these amendments.

2. Amendments to the Drawings

To have a more definite and clearly defined invention Applicants have amended the drawings. Specifically, Figs. 1-5 have been renumbered to Figs. 3-7. Also, former Fig. 1 has been amended to properly identify template 12, substrate 14, thin layer 20, substance 22, curing agent 24, and transfer layer 28; former Fig. 2 has been amended to properly identify template 12, substrate 14, curing agent 24, recess 40, and protrusion 42; and former Fig. 3 has been amended to properly identify template 12, substrate 14, and curing agent 24. Also, Applicants have added Figs. 1-2 to the patent application. No new matter has been introduced by way of these amendments as the same merely harmonizes the drawings with the written specification.

3. Rejections under 35 USC § 112, first paragraph and pursuant 35 USC section 102 and the Amendments to the Specification

In the Office action, claims 85, 94, and 101 were rejected as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had

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possession of the claimed invention. In addition, claims 85, 94 and 101 were rejected as allegedly being anticipated by Applicants' admitted prior art. This combination of rejections appears confusing, because of apparent double rejection contained in the rejection pursuant to 35 USC section 112, first paragraph.

The rejection pursuant to 35 USC section 112, first paragraph appears to recite that there is a lack of antecedent basis for the claim limitation, as well as a lack of support for the invention defined by the claim in the application as filed. Thus, the rejection pursuant to 35 USC section 112 alleges two requirements that Applicants failed to satisfy 1) the written description requirement; 2) and the enablement requirement. Applicants acquiesce to the finding that the exact language employed in the claims was not previously recited in the written specification. To that end, the written specification has been amended to be commensurate with the scope of the claims.

However, Applicants contend that the pending claims satisfy the enablement requirement. Specifically, Applicants have amended paragraphs **[0027]** and **[0033]** to clarify the teachings of the application and to harmonize the written specification with the figures. Referring to paragraph **[0027]**, it is stated "the electric field varies locally due to the presence of the topography of the template." To that end, implied within the varying nature of the electric field, as stated above, is that the electric field comprises a plurality of sub-electric fields each having a differing magnitude associated therewith, and thus the

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varying nature of the electric field is achieved. The differing magnitudes associated with the electric field are a result of having the template comprises a plurality of protrusions and recesses (see Fig. 4), wherein the plurality of protrusions are spaced-apart a first distance from the substrate and the plurality of recesses are spaced-apart a second distance from the substrate, with the first and the second distances being substantially different. As is well know in general laws of physics, the magnitude of an electric field as seen by a test point is inversely proportional to the distance between the test point and the point of application of the electric field. (See Serway, Raymond A., 1983, Physics for Scientists and Engineers/with Modern Physics, New York, Saunders College Publishing, pages 409-410). To that end, the varying distance between the plurality of protrusions and the substrate and the plurality of recesses and the substrate lead to the aforementioned varying electric field across the topography of the template, and more specifically, a first electric field associated with the plurality of protrusions and a second electric field associated with the plurality of recesses.

Also, by having a plurality of sub-electric fields, it then follows that any two of the plurality of sub-electric fields are adjacent one another. As a result of having two sub-electric fields defined next to another one wherein the two sub-electric fields have differing electric field strengths associated therewith, it is inherent that an electric field gradient is defined between the any two adjacent sub-electric fields. To that end, EXHIBIT A is

provided to give a graphic depiction that the electric field gradients are implied within the context of a varying electric field, wherein EXHIBIT A is an enlarged photocopy of Figure 2. As shown in EXHIBIT A, the template comprises a protrusion  $P_1$  defined between two recesses  $R_1$  and  $R_2$ . The protrusion  $P_1$  is defined a distance  $T_1$  from a plane of the substrate and recesses  $R_1$  and  $R_2$  are defined a distance  $T_2$  from the same plane of the substrate, wherein distance  $T_1$  is greater than distance  $T_2$ . As mentioned above, a first electric field is associated with protrusions  $P_1$ , shown as electric field region  $S_1$  and a second electric field is associated with recesses  $R_1$  and  $R_2$ , shown as electric field regions  $S_2$  and  $S_3$ , respectively. However, at the junction of electric field regions  $S_1$  and  $S_2$  is an electric field gradient region  $S_4$ . Electric field gradient region  $S_4$  arises naturally from the fact that as two electric field regions of varying magnitude are placed adjacent one another, an electric field gradient must exist between the two for the transition from one electric field magnitude to the second electric field magnitude. Electric field gradient region  $S_5$  may be defined in the same manner as electric field gradient region  $S_4$ , as it is at the junction of electric field regions  $S_1$  and  $S_3$ . Therefore, it can be shown from EXHIBIT A that a contiguous region of liquid may be formed between two spaced-apart electric field gradients, namely electric field gradient regions  $S_4$  and  $S_5$ . Thus, the amendments made to the specification do not introduce new matter. Furthermore, it is submitted that the admitted prior art does not teach or suggest the invention defined by the claims. As a result, Applicants contend that the claims satisfy the requirements of 35 USC

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section 112, first paragraph and the invention defined thereby is not anticipated by the cited prior art.

4. Rejection of the Dependent Claims

Considering that the dependent claims include all of the features of the independent claims from which they depend, these claims are patentable to the extent that the independent claims are patentable. Therefore, Applicants respectfully contend that the dependent claims define methods suitable for patent protection.

Applicants respectfully request reconsideration of the claims in view of the remarks made herein. A notice of allowance is earnestly solicited.

CERTIFICATE OF MAILING

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: MAIL STOP AF, Alexandria, VA 22313

Signed: 

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Respectfully Submitted,



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